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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,126	06/21/2001	Chun-Yuan Lee	LEEC3041/EM/6908	4693

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EXAMINER	
THAI, LUAN C	
ART UNIT	PAPER NUMBER
2827	

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/885,126	LEE ET AL.	
	Examiner	Art Unit	
	Luan Thai	2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 8, 13-14, and 17 are objected to because of the following informalities:

a) In claim 1, there are more than one period in the claim.

b) In claim 8, the claim does not end with a period.

c) In claims 13-14, there are more than one period in the claim.

d) In claim 17, the claimed of "the structure of the insulation layer is in conformity with the profile of the variable impedance material" is already recited in claim 7.

Applicant is reminded of the proper format for a claim of the disclosure: "... Each claim begins with a capital letter and ends with a period ...". See MPEP 608.01 (m).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims **1-12, 14-15, 17, and 19-21** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims **6, 9, 12, and 20-21** the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The recitations "oxide or metallic oxide " in claims **6, 12, and 21,** and "a glass or ceramic" in claims **9 and 20**, are unclear. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See Ex parte Markush , 1925 C.D. 126 (Comm'r Pat. 1925).

In claim **1**, the recitation "A conductive electrode" in line 4 and the recitation "A conductive electrode" in line 8, are unclear as to whether they imply the same or different electrodes.

In claims **7 and 17-18**, the recitation "the structure of the insulation layer is ***in conformity*** with ***the profile*** of the variable impedance material" is unclear and not understood by the examiner.

In claim **8**, the recitation "A variable impedance material that is placed on the insulation layer between the signal electrode and the ground electrode and connects with the signal electrode and the ground electrode ***through*** *the variable impedance material*" is unclear. Is there two "variable impedance material" connected together?

In claim **4**, the limitations "the signal electrode" and " the ground electrode" have no antecedent basis.

Claims **2-7, 9-12, 14-15, 17, and 19-21** are rejected since each includes the limitations of independent claim **1**.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-2 and 4-21, insofar as in compliance with 35 USC 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pryor et al. (4,809,044).

The figures and reference numbers referred to in this office action are used merely to indicate an example of a specific teaching and are not to be taken as limiting.

Regarding claims 1-2, 6-9, 12, 14, and 19-21, Pryor et al (see specifically figure 2) a kind of transient voltage suppressor structure including: a glass substrate 32; a conductive electrode 34 placed on the glass substrate 32; a variable impedance material 38 placed on the conductive electrode; an insulation layer 70 of silicon oxide placed on the variable impedance material and exposed a partial center area of the variable impedance material; a conductive line 66 placed on the insulation layer 70 and the exposed variable impedance material and connected with the variable impedance material. Although Pryor et al do not

label the conductive line 66 which is formed on and electrically connected to the conductive electrode 42 (see Pryor et al's figure 2) being "a conductive electrode" as Applicant's claimed, the conductive line 66 disclosed in Pryor et al's figure 2 does not distinguish from the claimed structure (e.g., the electrode 308 in applicant's figure 7). Furthermore, the labels nonetheless are meaningless. The Pryor et al's structure anticipates Applicant's claimed structure regardless of whether the layer is labeled "conductive line". See *In re Pearson* , 181 USPQ 642; Fx parte Minks 169 USPQ 120; or *In re* Swinehart 169 USPQ 226, all of which make it clear that mere "labels" or "statements of in intended use" as we have here in "conductive electrode" do not distinguish over Pryor et al's structure which may be likewise labeled.

Regarding claims 4, 10 and 13, the claimed of "a contact face existing between the variable impedance material and the signal electrode to conduct the transient voltage to the ground electrode" is taken to be inherent in the Pryor et al's device structure since such claimed limitation is the characteristic of a transient voltage suppressor.

Regarding claims 5 and 11, since the insulation layer 70, in Pryor et al figure 2, covers the edge of the variable impedance material 38, the layer 70 obviously can prevent the point discharge occurring on the edge of the signal electrode.

Regarding claims 15-18, Pryor et al further disclose the insulation layer 70 being formed in a box structure and inherently in conformity with the profile of the variable impedance material.

7. Claim 3, insofar as in compliance with 35 USC 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Pryor et al. (4,809,044) in view of Winnet et al (6,013,358).

The figures and reference numbers referred to in this office action are used merely to indicate an example of a specific teaching and are not to be taken as limiting.

Regarding claim 3, the proposed device of Pryor et al discloses all the limitations of the claimed invention as detailed above except for the substrate being made of ceramic.

Ceramic, however, is a conventional material in the art for making a substrate, as taught by Winnett et al, Col. 4, lines 18+. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use ceramic substrate in the proposed device of Pryor et al since ceramic substrate is conventionally used in the art, as disclosed by Winnett et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan Thai whose telephone number is (703) 308-1211. The examiner can normally be reached on 7:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (703) 305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Luan Thai
September 16, 2002

KAMAND CUNEO
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